40. (new) Structure according to claim 21, characterized in that the connecting elements that transmit essentially tension forces are attached, especially articulately joined, on the respective joints, and at least partially are formed by respectively two parallel extending wires or cables of steel.

REMARKS:

1) The specification is a literal translation of the PCT International Application in accordance with the PCT procedures. The Title of the Invention has been amended to better describe the invention using proper terms of art, in comparison to the original literally translated Title. The Specification has been amended at page 6, line 11, in conformance with an Amendment submitted under PCT Article 34 on October 22, 2001 in the PCT International Stage of this application. A marked-up version of the amended portions of the specification is enclosed. Please enter these amendments.

2) New claim 21 is essentially a translation of amended claim 1 that was submitted under PCT Article 34 on October 22, 2001 in the PCT International Stage of this application. New claims 22 to 40 substantially correspond to literally translated original PCT claims 2 to 20, while omitting multiple dependencies. A few streamlining editorial revisions of some of the claim language have been made as well.

3) Examination of the present U. S. National Phase Application is to proceed on the basis of new claims 21 to 40. Any informalities that might remain in the literally translated description and claims will be addressed later during the pendency of this application.

4) Favorable consideration and allowance of claims 21 to 40 are respectfully requested.

Respectfully submitted,

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FEBRUARY 25 2002

WFF:ar/4299/PCT
Encls.: postcard, marked-up version of spec. pages 1, 5 and 6

"MARKED-UP VERSION"

DOCKET NO: 4299/PCT
INVENTOR: Gerhard RUECKERT

LITERAL TRANSLATION OF PCT INTERNATIONAL APPLICATION PCT/EP00/07728 FILED ON AUGUST 9, 2000

[Variable Support] (Deployable Structure With [a] Modular (Configuration [Construction], Consisting of at Least One Collapsible [Structural] Module

The invention relates to a variable or deployable support structure with a modular construction or configuration, consisting of at least one collapsible support structure cell or module according to the preamble of the claim 1.

A support structure of such type is, for example, known from the U. S. 4,580,375. Therein, the at least one joint of the third joint set is connected with the four corner joints of the first joint set by means of four rods, which are articulately connected with one another in the joint of the third joint set. In a corresponding manner, the corner joints of the second joint set are connected by four rods with a further joint of the third joint set. The rods that lead from the one and the further joint of the third joint set to neighboring corner joints of the first and second joint set are crossed-over and pivotally connected with one another, and respectively form an inner scissors arrangement arranged within the support structure module. The neighboring corner joints of the first and second joint set are connected, i.e. fixed in their position relative to each other, with neighboring corner joints of the second or first joint set of a neighboring corner, by a guide mechanism in the form of rods

erection, and disassembly or take-down is minimal, while the freedom in embodying the configuration is great. The structural static characteristics are especially advantageous. Applications for pavilions, tents, dug-out shelters, emergency shelters, erecting and sheathing systems, come into consideration just as applications in the fields of aeronautic and astronautic technology, for example for antennas and masts, in the construction of pieces of furniture or for objects in the field of play and leisure-time activities, such as kites for example. Locationally fixed but temporary applications are, for example, to roof-over sport and recreational facilities, public plazas, terraces, or atrium or interior spaces. Permanent support structures can be very rationally erected by the connection of plural individual stressed or expanded substructures, which in turn again may consist of plural support structure cells or modules, for example by being suspended into place by means of a crane.

The at least one joint of the third joint set is connected with at least two joints of the first and/or second joint set, preferably with three, four or all joints of the first and/or second joint set of the support structure cell or module, by a connecting element that transmits essentially only tension forces. These connecting elements conduct the tension forces that arise upon loading of the support structure by a useable payload and/or the self-weight load or dead load, from the joint of the third joint set to the joints of the first and/or second joint set. Preferably, the joint of the third joint set is equidistant to the ones connected to it or to all joints of the first and/or

second joint set. The corner joints of the first joint set form a first, for example upper, bounding surface of the support structure and are spaced, generally in the vertical direction, from the associated corner joints of the second joint set which form a second, for example lower, bounding surface of the support structure. The connecting elements which essentially transmit tension forces are fixed, especially articulately joined, at the respective joints, and are, for example, formed of respectively two parallel extending wires or cables of steel or another suitable material. The at least one joint of the third joint set [preferably] lies below the lowermost corner joint of the first joint set with which it is connected.

A joint of the third joint set is connected with at least one, preferably with three, four or all of the joints of the second joint set, by a connecting element that transmits compression and tension forces. Preferably, this joint of the third joint set is equidistant to the one connected to it or to all of the joints of the second joint set. The forces arising upon loading of the support structure are transmitted away by this connecting element, essentially as compression forces, to the joints of the second joint set, of which generally a portion rest on a support of the support structure. The connecting elements that transmit tension and compression forces are articulately joined to the respective joints and are especially formed by rods of aluminum or some other suitable material. Basically it pertains that the utilized materials comprise the smallest possible mass with a sufficient load capacity. The joints of the third joint set are